

**IN THE CLAIMS:**

1. (currently amended) An optimization system for processing encoded video data, comprising:

a frame analysis system ~~that determines if~~configured for examining a current video frame having an overlaid area, and for determining, from the examining, whether said current video frame acts as a reference for future video frames; and

a system configured for identifying, based on a determination reached in said determining for said current video frame, a skippable region in the overlaid area of said current video frame skippable for purposes of the acting as said reference.

2. (currently amended) ~~The optimization system of claim 1~~An optimization system for processing encoded video data, comprising:

a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, wherein  
the frame analysis system examines a picture type of the current video frame, and  
wherein the identification system identifies the entire overlaid area as the skippable region if the current video frame comprises a B picture.

3. (currently amended) ~~The optimization system of claim 1~~An optimization system for processing encoded video data, comprising:

\_\_\_\_\_ a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

\_\_\_\_\_ a system for identifying a skippable region in the overlaid area, wherein  
the frame analysis system examines a sequence of video frames, and wherein the  
identification system identifies the entire overlaid area as the skippable region if none of  
the sequence of video frames acts as reference frames.

4. (currently amended) ~~The optimization system of claim 1~~ An optimization system for processing encoded video data, comprising:

\_\_\_\_\_ a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

\_\_\_\_\_ a system for identifying a skippable region in the overlaid area, further  
comprising a motion vector analysis system that calculates a motion vector range for the  
current video frame.

5. (original) The optimization system of claim 4, wherein the skippable region  
comprises the overlaid area less an area defined by the motion vector range.

6. (currently amended) ~~The optimization system of claim 1~~ An optimization system for processing encoded video data, comprising:

\_\_\_\_\_ a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, further comprising a motion vector analysis system that examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current video frame.

7. (original) The optimization system of claim 6, wherein the skippable region comprises the overlaid area less the prediction macroblocks identified in the overlaid area of the current video frame.

8. (original) The optimization system of claim 6, wherein the predicted frame includes the overlaid area, and wherein the motion vector analysis system does not examine motion vectors in the overlaid area of the predicted frame.

9. (original) The optimization system of claim 1, further comprising a system for examining side information in the encoded video data.

10. (original) The optimization system of claim 1, wherein the frame analysis system determines a plurality of predicted frames that reference the current video frame; wherein the identification system identifies a plurality of skippable regions; and wherein a final skippable region is determined as a cross set of each of the identified skippable regions.

11. (original) The optimization system of claim 1, further comprising a decoder

for decoding the encoded video data.

12. (original) The optimization system of claim 11, wherein the shippable region is utilized by a component of the decoder to reduce computational complexity.

13. (original) The optimization system of claim 12, wherein the component is selected from the group consisting of: an inverse scanning/inverse quantization system, an inverse discrete cosine transform system, a motion compensation system, and a residual adding system.

14. (currently amended) A program product, stored on a recordable medium, that when executed processes encoded video data, the program product comprising:

means for ~~examining~~determining if a current video frame having an overlaid area, and for determining, from the examining, whether said current video frame acts as a reference for future video frames; and

means for identifying, based on a determination reached in said determining for said current video frame, a skippable-region in the overlaid area of said current video frame skippable for purposes of the acting as said reference.

15. (currently amended) ~~The program product of claim 14~~A program product, stored on a recordable medium, that when executed processes encoded video data, the program product comprising:

\_\_\_\_\_ means for determining if a current video frame having an overlaid area acts as a reference for future video frames; and

\_\_\_\_\_ means for identifying a skippable region in the overlaid area, further comprising means for calculating a motion vector range for a predicted frame that references the current video frame.

16. (original) The program product of claim 15, wherein the skippable region comprises the overlaid area less an area defined by the motion vector range.

17. (currently amended) ~~The program product of claim 14~~A program product, stored on a recordable medium, that when executed processes encoded video data, the program product comprising:

\_\_\_\_\_ means for determining if a current video frame having an overlaid area acts as a reference for future video frames; and

\_\_\_\_\_ means for identifying a skippable region in the overlaid area, further comprising means for examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame.

18. (original) The program product of claim 17, wherein the skippable region comprises the overlaid area less the identified prediction macroblocks identified in the overlaid area.

19. (original) The program product of claim 14, further comprising means for

examining side information in the encoded video data.

20. (currently amended) A method of processing encoded video data, comprising the steps of:

examining~~determining~~ if a current video frame having an overlaid area, and determining, from the examining, whether said current video frame acts as a reference for future video frames; and

identifying, based on a determination reached in said determining for said current video frame, a skippable region in the overlaid area of said current video frame skippable for purposes of the acting as said reference.

21. (currently amended) ~~The method of claim 20~~A method of processing encoded video data, comprising the steps of:

determining if a current video frame having an overlaid area acts as a reference for future video frames; and

identifying a skippable region in the overlaid area, wherein the identifying step comprises the steps of:

calculating a motion vector range for a predicted frame that references the current video frame; and

identifying the skippable region as comprising the overlaid area less an area defined by the motion vector range.

22. (currently amended) ~~The method of claim 20~~ A method of processing encoded video data, comprising the steps of:

determining if a current video frame having an overlaid area acts as a reference for future video frames; and

identifying a skippable region in the overlaid area, wherein the identifying step comprises the steps of:

examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame; and

identifying the skippable region as comprising the overlaid area less the prediction macroblocks identified in the overlaid area.

23. (original) The method of claim 20, wherein the determining step includes the step of: examining side information in the encoded video data.

24. (original) The method of claim 20, wherein the identifying step includes the step of: examining side information in the encoded video data.